## FURTHER DISCOVERIES CONCERNING THE KENSINGTON RUNE STONE

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In the last issue of the WISCONSIN MAGAZINE OF HISTORY I presented an article on the Kensington Rune Stone. After that article was in type certain important discoveries were made confirming some of the arguments presented and adding new light to our understanding of the circumstances under which the events recorded in the inscription transpired. The present contribution is for the purpose of recording these discoveries and bringing the discussion down to date.

As I shall refer to the text of the inscription a number of times in the following article, a translation of it is given below for the convenience of the reader.

Eight Goths and twenty-two Norsemen on (an) exploration-journey from Vinland through the western regions. We had camp by two skerries one day's journey north from this stone. We were (out) and fished one day. When we came home (we) found ten men red with blood and dead. Ave Maria! Save (us) from evil!

(We) have ten of our party by the sea to look after (or for) our vessels 14 day journey from this island. Year 1362.

In my former article I proved that the term "day's journey" in the Middle Ages represented a unit or measure of distance of approximately eighty miles. Therefore, when the rune master in the last sentence says that they were fourteen days' journey from the sea, he means that they were  $14 \times 80$  miles from the sea, or 1,120 miles, which agrees excellently with the actual distance from Kensington to Hudson Bay, the nearest "sea."

<sup>&</sup>lt;sup>1</sup> Wisconsin Magazine of History, Vol. 3, No. 2, pp. 176-78. Since writing the former article I find that William Hovgaard, professor of Naval Design and Construction in the Massachusetts Institute of Technology, in discussing the navigation of the Norsemen has also conclusively shown that a day's sail or day's journey, commonly written dægr, was used as a unit of distance as described above. See his Voyages of the Norsemen to America (New York, 1914), 61-64.

If "day's journey" means about eighty miles in one part of the inscription it must have the same meaning when used elsewhere in the same inscription. Therefore, when the rune master says that the two skerries (marking the camp where the massacre of the ten men occurred) lie one "day's journey" north of the rune stone, these skerries should be sought for about eighty miles north of Kensington.

On learning the meaning of "day's journey" a few months ago I became very curious as to the whereabouts of these skerries. If they could be found approximately eighty miles north of Kensington, the find would go far toward proving the truth of the inscription in that it would prove that the new and hitherto unguessed interpretation of "14 day journey" was correct. A discovery of these skerries would also lead to the discovery of the camp site where the massacre occurred, where other remains might be found. In October, 1919, therefore, I made a trip to Otter Tail and Becker counties, Minnesota, and searched all the numerous lakes there for skerries. I am very pleased to say that I found them.

The lakes of Becker County lie in the northern end of the beautiful Lake Park Region of Minnesota, studded with hundreds of sparkling lakes. I examined all the lakes of Becker and northern Otter Tail counties to see if there were any skerries. A "skerry" (Scandinavian, skjær) is a very small island of rock or gravel, void of vegetation and lying low upon the water. This kind of formation is very rare in the Lake Park Region, there being no place rock within the entire area. In none of these lakes, except one, were there any skerries to be seen. However, in Cormorant Lake, one of the largest of them all and lying farthest to the northwest, were two unmistakable skerries. No one who has stood upon the high hill on the northwestern shore of the lake and has seen these two remarkable skerries lying in a straight line before him can doubt that these are the right skerries. Nor could the rune master have found a better topographical mark of identification to describe the location of his camp.

While the skerries can be discerned from different points on the shore of the lake, there is only one place from which they can be seen prominently. This is the large hill south of John Johnson's farmhouse on the northwestern shore of the lake. This hill was in olden times covered with an open grove of very large trees and was used as a village site by the Indians. They told the first settlers that "this hill had always been their home." Many Indian remains have been found here. This hill was no doubt the camp site of the twenty explorers who in 1362 visited this region. It is almost a hundred feet high and rises steeply from the margin of the lake. The shore is covered with thousands of granite boulders.

As we were about to leave the stony shore and climb directly up this steep hill we noticed near the shore a particularly large, flat boulder almost overgrown with bushes and brambles. In the middle of this stone was a small hole which plainly had been bored by human agency. The hole was an inch in diameter and three-quarters of an inch deep. As we stood pondering upon the significance of this hole another of the party called our attention to another large stone close by which also had a hole in the center. This second hole was seven inches deep and was roughly triangular in shape. A triangular stick of wood, with the angles rounded off, seven inches long, each side measuring one and a quarter inches, would just fit the hole. Both of these boulders were about six feet in length and somewhat less in width. Their surfaces were flat and the insides of the holes were so weathered by the action of the elements that they appeared to have been chiseled hundreds of years ago.

What is the meaning of these strange holes? They could not have been intended for purposes of blasting, for the stones lie in one of the most inaccessible spots on the shore and thousands of similar boulders lie far more conveniently for anyone seeking such. Moreover the weathered appearance of the holes shows that they were made long before the first

white settlers came here. The holes are plainly prehistoric in origin. These holes, bearing plain testimony of the presence of man, would be worthy objects of speculation when found in any desert place, but appearing as they do on the very spot where these explorers of 1362 must have embarked and disembarked upon the fatal fishing trip they are doubly significant. As a memorial of their presence these boulders are second in importance only to the rune stone itself for they speak in mute language of the presence of these pre-Columbian travelers.

Being a mute testimony it is not easy to read the message right, but I would like to make a surmise. Serious deductive reasoning should be able to find the correct explanation of this faint message of bygone times. My solution is as follows:

These explorers came to Cormorant Lake and there need of food prompted them to go fishing. They had no boat but for twenty experienced men the problem of making a raft or punt would be simple. This must have been quite large as we read that ten men went out fishing. They presumably desired to use the raft more than once. The inscription reads "we were (out) and fished one day"—which indicates that they made a prolonged stay at this camp. Owing to its size they could not easily pull the raft up on the stony shore. other means was therefore needed for anchoring it. If they carried no flexible ropes they could not anchor the raft in the ordinary fashion; moreover, the roundish boulders of that region are unsuited for anchors. However, necessity is the mother of invention. One of the men is set to work to bore a hole in an immovable stone on the edge of the beach. He makes unsatisfactory progress because some stones are harder than others. He therefore leaves this stone after having made a hole three-quarters of an inch deep and chooses another large boulder near by. In this he chisels a hole seven inches deep and, upon second thought, makes the sides triangular. flexible withy of some sort, a vine or birch root is then chosen and securely wedged into the triangular hole. The other end is then tied to the raft which is thus as securely moored to the shore as any rope could do it.

The use of withies for cordage was very common among the Scandinavians of the Middle Ages. Such withies also entered largely into the construction of their vessels. According to Professor Hovgaard the heavier timbers of all their ocean-going vessels, such as the keel, the frames, and the bottom planks, were always fastened together with withies.2 This gave a greater flexibility to the vessel than was possible with iron bolts. So deft were they in the manipulation of withies that sometimes large ocean-going vessels were securely joined together without any iron bolts, nails, or rivets in their construction, withies and wooden plugs taking the place of these.3 Even at the present time the Norsemen make large use of withies for binding purposes. I have before me a sheep collar which a farmer of Norway fashioned for me out of two birch twigs a few years ago in five minutes' time. The ends are shaped into a very serviceable snap and ring; the collar, which is very flexible, is so strong that I was assured that a horse could not pull it in two with a straight pull. This sheep collar shows that birch twigs one-quarter inch in diameter when twisted can be bent to an arc of a radius equal to their diameter without breaking.

These observations are sufficient, I believe, to show that it would be a simple and natural thing for these explorers to make a stout rope out of withies with which to tie their raft. Nor would the problem of wedging these into the anchor stone present any difficulty. The withies used in the construction of their vessels were wedged in so securely that they withstood the heaviest buffetings of the sea. The same principle is used nowadays by builders in elevating large stones. A small hole

<sup>&</sup>lt;sup>2</sup> Op. cit., 52-53.

<sup>&</sup>lt;sup>3</sup> See account in *Flatey Annals*; also *Annals Regii* and *Odda Annals* under date of 1189, telling of Asmund Kastanraste's vessel built in Greenland which contained only one iron bolt.

is chiseled in the middle of the stone; a wedge called a "lewis" is inserted; and the stone is safely lifted to the desired height.

These anchor stones are at present lying about five or six feet above the level of the lake; this indicates that the lake level in 1362 may have been four or five feet higher than it is at present. It could not have been much higher as this lake at high water has an outlet both at the north and at the south. Cormorant Lake happens to be the highest of all the lakes in that region, being the uppermost source of Pelican River. But even if the lake were only five feet higher than at present. both of the skerries would be under water. Does this then mean that in 1362, when the water presumably was five feet higher than it now is, these skerries did not exist as skerries but only as reefs? Not necessarily. The great mass of boulders which are strewn around the shore indicates that these skerries formerly were much bigger and higher than now. The nature of these skerries is such that their height above the water is determined by the moving ice which shoves back and forth like a huge planer each spring. They consist of boulders of all sizes which are cemented together with sand and gravel. Let us assume that the skerries formerly were five feet higher than now and that the water fell five feet. Little by little as the water fell the rains would wash out and erode the sand and gravel which bind the boulders together until finally the moving icefloes would get a grasp upon them and carry them away. In this manner, therefore, the tops of the skerries would diminish as the lake level lowered.

Cormorant Lake is the first lake of any size that these explorers would come to from the northwest, the probable direction of their approach. After a very long and wearisome march over the vast Red River Valley prairie, where game would be scarce and hard to approach, the wooded hills and beautiful expanse of Cormorant Lake would look very pleasant to them and invite them to a long stay. This is also one of the largest of these lakes, with many coves and head-

lands. This explains why the ten men who were out fishing heard or saw nothing of the tragedy that had overtaken their comrades until they returned and "found ten men, red with blood and dead." Even in the brief words upon the stone we can recognize the horrified surprise which met them and which causes the rune master to exclaim, "Ave Maria! Save (us) from evil!"

There can be no doubt that the survivors gave themselves time to bury their dead in a decent fashion. The next step in this investigation is therefore to find this burial spot. As we stood upon the hill of the camp site, Mr. Johnson pointed out a small knoll about sixty rods back from the lake and said: "Someone is surely buried over there."

"Why?"

"Because there are several sunken graves on that knoll."

We went over to the knoll and found that there really were a number of "sunken graves" on the knoll. They were not hollows caused by uprooted trees, except in one instance, but looked just like neglected graves. Whether these are of red or white men's origin I do not know. The knoll has never been plowed as it lies just inside the bounds of a piece of stony woodland. I made no excavations and requested Mr. Johnson not to disturb the mound until it can be excavated in a scientific manner. This will probably be done next spring.